

REMARKS

Upon entry of this amendment, claims 1, 5, 8, 9, 12 and 13 are pending in the instant application. Claims 2-4, 6-7, 10-11 and 14 have been cancelled herein without prejudice or disclaimer. Accordingly, Applicants reserve the right to prosecute the cancelled subject matter, as well as the originally filed claims, in later-filed continuing applications. Claims 1, 5, and 8 have been amended. Support for the claim amendments is found throughout the specification and in the claims as originally filed. For example, support for the amendments to claims 1 and 5 is found at least at page 10, lines 27-31; in Table 5 on pages 12-13; at page 25, lines 23-30; and at page 37, lines 23-24. Claim 8 has been amended solely to maintain antecedent basis throughout the amended claims. Accordingly, no new matter has been added by this filing.

Priority

The Examiner has acknowledged the claimed benefit of priority to parent application U.S.S.N. 09/689,486. The “Related Applications” section of the specification at page 1, lines 4-7 has been amended to reflect the issuance of U.S.S.N 09/689,486 as U.S. Patent No. 6,855,806.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Written Description

The Examiner has rejected claims 1-14 under 35 U.S.C. § 112, first paragraph for lack of written description. According to the Examiner, “the specification does not provide a sufficient written description for the genus of polypeptides encompassed by these claims or the genus of nucleic acids encoding these polypeptides.” (Office Action, page 3).

The pending claims have been amended herein. In particular, independent claim 1 has been amended to recite an isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising an amino acid sequence selected from the group consisting of: (a) a mature form of an amino acid sequence of SEQ ID NO: 5; (b) an amino acid sequence of SEQ ID NO: 5; or (c) an amino acid sequence consisting of SEQ ID NO: 5; or a nucleic acid molecule comprising the complement of the nucleic acid molecule encoding (a), (b), or (c).

The claimed nucleic acids are described throughout the as-filed specification. For example, support for the nucleic acids recited by amended claims 1 and 5 is found at least at page 10, lines 27-31; in Table 5 on pages 12-13; at page 25, lines 23-30; and at page 37, lines 23-24 of

the as-filed specification. Thus, the disclosure provided throughout the as-filed specification is commensurate with the scope of the amended claims presented herein. Accordingly, Applicants submit that the specification provides sufficient written description of the claimed methods of identifying a cancer cell selected from colon cancer, renal cancer and thyroid cancer so as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the instant application was filed. As such, this rejection should be withdrawn.

Enablement

The Examiner has also rejected claims 1-14 under 35 U.S.C. § 112, first paragraph for lack of enablement.

As described above, claim 1, as amended, recites an isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising an amino acid sequence selected from the group consisting of: (a) a mature form of an amino acid sequence of SEQ ID NO: 5; (b) an amino acid sequence of SEQ ID NO: 5; or (c) an amino acid sequence consisting of SEQ ID NO: 5; or a nucleic acid molecule comprising the complement of the nucleic acid molecule encoding (a), (b), or (c).

Applicants submit that the specification is enabling for the nucleic acid molecules recited by the claims as amended herein. The amended claims are no longer directed to variants or fragments of the amino acid sequence of SEQ ID NO: 5, or to methods of treating or preventing NOV-associated disorders. Thus, Applicants submit that a person of ordinary skill in the art, with the specification in hand and given the state of the art at the time of filing, could make and use the claimed nucleic acid molecules without undue experimentation. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1-14 have been rejected under 35 U.S.C. § 112, second paragraph for being indefinite. Claim 1 has been rejected because “[w]hile group members (a)-(d) recite various amino acid sequences, members (e) and (f) recite nucleic acid fragments or molecules, not amino acid sequences.” Claim 6 has been rejected for being “confusing in the recitation that the nucleic acid molecule hybridizes to either SEQ ID NO:4 or its complement.” Claim 7 has been rejected

for reciting a “group of nucleic acid molecules [including] a first nucleic acid sequence and a second isolated polynucleotide.” In addition, claim 14 has been rejected because, according to the Examiner, this claim “provides for the use of the nucleic acid of claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method process applicant is intending to encompass.” (See Office Action, pages 10-11).

Claims 6, 7, and 14 have been cancelled herein, thereby obviating any rejections of these claims. Claim 1 has been amended to recite an isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising an amino acid sequence selected from the group consisting of: (a) a mature form of an amino acid sequence of SEQ ID NO: 5; (b) an amino acid sequence of SEQ ID NO: 5; or (c) an amino acid sequence consisting of SEQ ID NO: 5; or a nucleic acid molecule comprising the complement of the nucleic acid molecule encoding (a), (b), or (c). Thus, members (a), (b), and (c) of amended claim 1 all recite various amino acid sequences. Moreover, claim 1, as amended, recites the members (a), (b) and (c), or a nucleic acid molecule comprising the complement of the nucleic acid encoding these members.

Accordingly, Applicants submit that amended claim 1 is clear and definite. As such, withdrawal of this rejection is requested.

Claim Rejections Under 35 U.S.C. § 101

In the paragraph bridging pages 11-12 of the Office Action, the Examiner has rejected claim 14 under 35 U.S.C. § 101 because “the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101.”

Claim 14 has been cancelled herein, thereby rendering any rejections of this claim moot.

Claim Rejections Under 35 U.S.C. § 102

Claims 1 and 5-7 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Chan *et al.*, Oncogene, vol. 6(6):1057-1061 (1991) (“Chan”). According to the Examiner, Chan describes “a human EEK cDNA which encodes a polypeptide with an amino acid sequence that is 100% identical to a fragment of SEQ ID NO: 5.” (Office Action, page 12).

Claims 1 and 5-9 have also been rejected under 35 U.S.C. § 102(b) as being anticipated by Park *et al.*, Oncogene, vol. 14:533-542 (1997) (“Park”). According to the Examiner, Park

describes “a full length cDNA encoding mouse EEK and an expression vector comprising the EEK cDNA operably linked to a promoter.” (Office Action, page 13).

As described above, independent claim 1 has been amended to recite an isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising an amino acid sequence selected from the group consisting of: (a) a mature form of an amino acid sequence of SEQ ID NO: 5; (b) an amino acid sequence of SEQ ID NO: 5; or (c) an amino acid sequence consisting of SEQ ID NO: 5; or a nucleic acid molecule comprising the complement of the nucleic acid molecule encoding (a), (b), or (c).

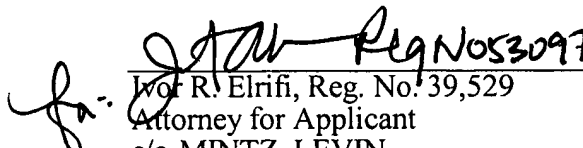
In contrast to the nucleic acids of the claimed invention, the Chan and Park references do not disclose or suggest nucleic acid molecules that encode either a mature form of the an amino acid sequence of SEQ ID NO: 5, a polypeptide that comprises an amino acid sequence of SEQ ID NO: 5, or a polypeptide that consists of amino acid sequence of SEQ ID NO: 5 (or the complements of the nucleic acid molecules that encodes these polypeptides). Accordingly, the amended claims are novel over the cited references, and this rejection should be withdrawn.

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U.S.S.N. 10/691,165

CONCLUSION

Applicants respectfully submit that the pending claims are in condition for allowance. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

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